Horticulture Northwest

Journal of the Northwest Ornamental Horticultural Society



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Membership Chairman Northwest Ornamental Horticultural Society University of Washington Arboretum Seattle, Washington 98195

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Editor:

Sallie D. Allen 18540 26th Avenue N.E. Seattle, Washington 98155

Associate Editor:

Ginny McElwain

Art Editor:

Mareen S. Kruckeberg

Ad Manager:

Betsy Huse

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Horticulture Northwest

Volume 5 Number 2 Summer 1978

Sallie D. Allen, Editor

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Editorial

The concept of horticulture as therapy has been around for a long time, recognized and prescribed for mental illness by eminent physicians as early as the 18th century, long before the advent of psychiatry. Aside from the pleasure and relaxation derived from gardening along with the satisfaction of successfully achieving areas of color, fragrance and beauty, gardeners throughout time have known the therapeutic value of working with soil and plants during times of stress or anxiety. Feelings of frustration, aggression and hostility can be dissipated by literally digging them into a completely absorbing garden project, turning negative emotions into positive ones.

Mr. Charles Lewis, horticulturist from Morton Arboretum and coordinator of the American Horticultural Society People-Plant program, lectured in Seattle in 1975 and 1976; his subject, "Human Response to Plants: A Man-Environment Relationship". He emphasized his enthusiastic support of horticultural therapy based on the knowledge that people respond to plants and benefit from their presence, and that it has been part of successful treatment not only for persons who are mentally ill, but also for the retarded, physically handicapped, in prison and chronically ill. Mr. Lewis, an inspiring speaker, manages to create within his audience the feeling that we all need to do more in the field of service, in teaching, sharing and getting involved.

Horticultural therapy is not new to Mr. Jerry Kluin, Director of the highly successful pilot program at Firland Correctional Center for young first time offenders in the adult prison system. Although highly controversial at the onset, in two short years the greenhouses are overflowing with marketable plant material grown from seed and cuttings, a garden shop of fresh and dried arrangements, a work experience program landscaping state prison facilities. The NOHS is involved in what we anticipate will be a mutually rewarding association of unlimited scope. Two of our members are on their horticultural advisory board and they will assist us in propagating rare plant material found only in the gardens of some of our members, with seed exchange, and with setting up plant sales as they did last fall. We enjoyed meeting and working with Jerry and "his boys".

The Resource Village campus, formerly Victoria Village, located in a beautiful country atmosphere east of Stanwood, Washington, is a residential community for 36 mentally handicapped young adults, ages 17 to 26. Sixty acres of rolling grass and woodland is the setting for an attractive home style administration building with kitchen and dining facilities, four single story cottages for the residents, a work-activity center for educational and vocational training, and a shop with woodworking equipment. The grounds, vegetable garden and orchard are maintained by the trainees. A very large greenhouse was recently completed to broaden the scope of their training program and assistance was needed. Three of our members have formed an initial horticultural advisory committee to formulate a proposal with immediate goals of selecting appropriate plant material for an early market and to develop a long range plan for an ongoing vocational-educational-enrichment program. All NOHS members, thus far contacted concerning this very exciting venture, have responded enthusiastically with offers of seed, plants, books, services and thoughtful suggestions, all deeply appreciated.



Ask Any Maidenhair

Sue Olsen
Bellevue, Washington

The graceful adiantums (maidenhair ferns - so named according to one herbal source because a concoction of wine, parsley seed and maidenhair fronds colored the hair...and just incidentally cured asthma as well) are among the loveliest of ferns. Few plants can match the delicate beauty and airy texture of the many maidenhairs. They have a black stem (stipe) topped with bright green foliage of fine textured pinnae, which range from filigree minute to silver dollar size (responsible for one "common" name) and may also be crested, variegated or tinged with red especially in new growth.

Our hardy adiantums blend and fend nicely for themselves in our woodland and intimate gardens depending on the species selected. The indoor varieties, however, labor under a reputation of being "difficult, impossible and fussy" to name a few of the polite terms. I should like to suggest that they also labor with forced air heat, cold and/or hot windows, lovingly performed drownings plus an occasional dash of forced feeding none of which tend to extend their life expectancy. Properly tended all varieties add lightness and interest to the indoor plant collection and are worth a niche in their special microclimate.

Pot your maidenhair in a mixture of 1/3 peat, vermiculite and leaf mold or a commercial potting soil cut by 50% with vermiculite (and this includes the so called "fern mixes") and add just a dash of lime...an egg shell will do. The pot should fit the plant as they prefer a snuggy container and overpotting is frequently mortal. The soil should be continually moist without being sopping and the water given should be at room temperature...these are tropicals not Finns. If a frond dries up it will not recover and should be removed. If the entire plant dries up, it should be sheared, watered and given your apologies. Ideally, fresh new fronds will appear in short order. One month is an adequate testing period between life and the compost heap. Brown at the tips of the fronds indicate that the plant was allowed to dry out during a period of new growth. The crested varieties are especially vulnerable.

Many persons accustomed to success with a daily or at least regular misting of the Boston fern, assume that a happy maidenhair is a misted maidenhair. The results are often a disaster. The water does not evaporate readily from the foliage (although the word adiantum comes from the Greek word meaning "to shed water") and it simply rots. 'Fluffy Ruffles' variety of the Boston fern as well as many other ferns react similarly to misting.

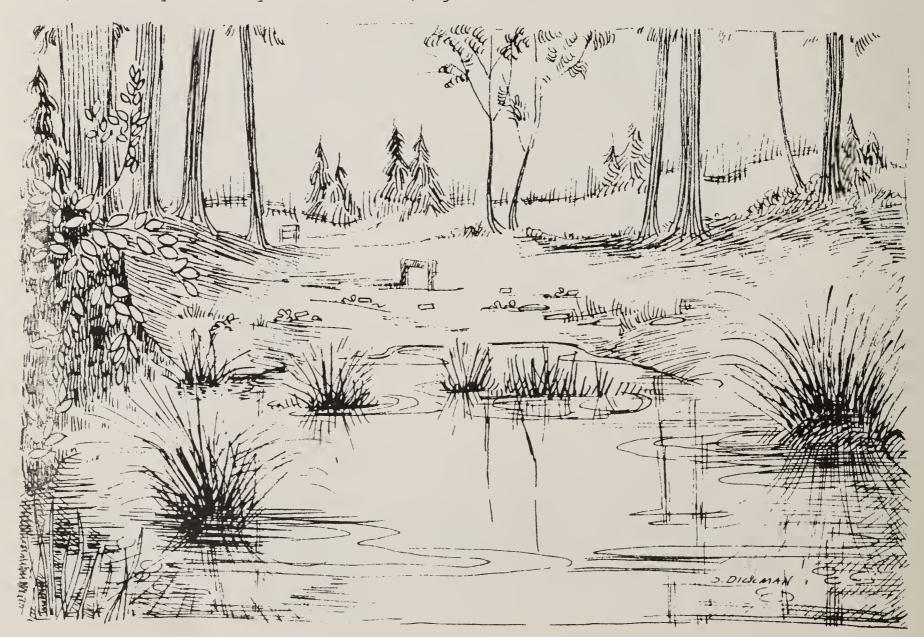
The thin texture does require humidity, however, which is best provided by standing the pot on but not in water. The easiest solution is to place a pot within a pot with rocks and water in the bottom of the master container. There are several new pots on the market with built in humidity chambers which should be good, but I've not yet tested them. Otherwise standing them on pebble and puddle filled saucers achieves the necessary humidity requirements. Grouping plants is also helpful allowing them to share moisture while pleasing the eye.

Like most ferns, the maidenhairs like full light without direct sunlight. They do admirably well under fluorescents...cool white is fine. A room temperature below 70 degrees and placement away from drafts, heaters and temperature fluctuating windows should preserve their health and beauty.

The maidenhairs appreciate a regular feeding schedule - "Aqua feed" and "Spoonit" are excellent fertilizers used at 1/2 strength once a month. Although evergreen, at some period during the year the plant is dormant, sending up no new fronds. Feeding then is not recommended and reminds me of the faithful attendants who wake hospital patients up in the middle of the night for their sleeping pill.

Easier varieties on today's market include all forms with medium sized pinnae (say 1/4 inch). Among these are Adiantum hispidulum which has rosy new growth, thicker texture, and a shape superficially resembling our native A. pedatum (and may even be tried outdoors by the adventuresome); A. bellum with apple green overlapping pinnae; A. raddianum c.v. 'Triumph' tall and open growing; and A. raddianum c.v. 'Pacific Maid' which is dense growing and good in terrariums. The various A. raddianum fronds last well in cut arrangements and are frequently used in the florist trade. To prepare a frond singe the stipe and place the moistened frond in a sealed inflated plastic bag in the refrigerator for several hours or overnight.

For the best listing of species and varieties see <u>Baileya</u>, Vol. 17; Numbers 3 and 4; 1970; published by Cornell University, Ithaca, New York. And may I never hear, "I always lose my maidenhairs", again.



Bog Garden, U. B. C. Botanical Garden

Building a Bog Garden

A. A. Rose
Botanical Garden
University of British Columbia

Bog gardening, in my opinion, is as interesting as rock gardening. There are many little treasures that cannot be grown in a rock garden, that can be grown in a bog. It is a cool and relaxing place to sit on a hot day and think of all of the plants that you would like to have.

I have found that to make a bog garden you must have three qualifications:

1) to be all thumbs, 2) to not know what you are doing, 3) to be unable to think. With these qualifications you can jump right in and get the job done, and jump right in is just what I mean as you will see.

First, a large hole was dug in the woods of the native section of the University of British Columbia Botanical Garden, and lined with one to two feet of clay. It was then filled with water and as such I received it three years ago when I joined the staff here. Not knowing what to do, having never made a bog before, I looked around for helpful advice. None was to be had so I just jumped right in.

It was in March of 1975 when we received truck loads of peat, the ground commercial type that you can buy in bales. We wheeled it in with the wheel-barrow, dumped it into the water and started tramping in order to mix the peat with the water until it was firm enough to stand on. After pulling each other out of the mud, often losing our boots, going home with aching legs and waking up in the middle of the night with leg cramps, we finally had the hardest part done.

If you are planning to build a bog, plan the walkway, if you need one, before you put in the peat. Since I did not know what to do, I had to find out the hard way. I'm starting them now that the bog is planted and I have no place for the extra peat. Use wood rounds, stones or anything you think will do for your walkways.

In our bog the depth of the peat varies from three inches at the outer edge, to two feet in the water. Make high and low areas so that you have conditions that are really wet for some plants and those that are drier for others. You can use your stepping material or while on one of your trips, collect small pieces of moss-covered log from damp places.

Orchids that normally grow in bogs like to have their roots in clay, as do the skunk cabbage, (Lysichytum americanum) and Veratrum. Even ladiestresses, (Spiranthes romanzoffiana) will grow in a very wet part. Calthas like to have some good rich loam mixed with their peat, so when you are out in the woods, collect some soil from underneath the deciduous trees, and put it in a corner of your bog for those plants that prefer it.

Most ericaceous plant like some leaf mold on top of the peat, or better still, mosses which add a yearly layer of decaying material with the acids that these bog plants require. Pyrolas which depend on fungi to obtain their food for them, will grow better on the drier side, if you take the time to collect some of the soil that they are growing in, and dig it right in as you are planting them. Although deer cabbage, (Fauria crista-galli) usually grows in water, it makes an exceptional plant in this drier part. It grows about eight to ten inches high, a completely rounded mound and blooms very well. I well recommend it. It is also interesting in winter when the leaves are gone.

Such things as Silene acaulis, Campanula rotundifolia, Sibbaldia procumbens, listeras, willows and sedums all grow at the higher edge of the bog. Saxifraga tolmiei and S. aizoides grow very well here too, with sand

Saxifraga tolmiei
Illustration by: Sally Dickman



added for drainage. Primula mistassinica likes a spot all its own, in sandy, gravelly soil, just above water line, moist but not wet. As yet I have not found any way to grow any species of Pedicularis.

Whatever you do, don't plant *Luetkea pectinata* because it will spread all over your bog along with asters and willowherbs. You will get a lot of liverwort, but you can do two things; pull it out along with most of your plants and soil, or plant mosses, which will outgrow the liverwort.

I have learned, as have all of the people from whom I have received my little bit of knowledge, that no matter how big you make a bog or garden, you will never have enough room for all of the plants you want to add to it. For those who decide to make a bog, it sounds like a great deal of work, but it is well worth it. Each time you stop to weed it you will enjoy every minute because there is always something new to see.

Clianthus puniceus

Brian Halliwell Royal Botanic Gardens Kew Richmond, Surrey, England

Clianthus puniceus is native to the North Island of New Zealand where it is rare in the wild, now recorded from only two localities. It is, how-ever, common in New Zealand gardens but for some reason it has never achieved a similar popularity in gardens elsewhere in the world.

It is a woody member of the pea family with lax arching branches which may build up into a mound of six feet. In a garden it is better treated as a wall shrub, planted to grow over a stump or through an old or dead shrub where its branches can be supported to show off its flowers. It is evergreen, with alternate leaves made up of numerous small round leaflets arranged in pairs. Flowering, which is terminal, can be in almost any month from January until May depending on the degree and length of the winter cold. The pendent bunches of flowers are produced in the latter part of the fall and carried through the winter completing their development when the weather is warm enough. The individual flowers are sizable and each has a large keel reminiscent of a parrot's beak which is one of the common names of this plant. In New Zealand the common name is Kaka Beak (a kaka is a bird of the parrot family) whilst two other names are Lobster's Claw and Glory Pea. Red is the usual color but there are flowers of varying shades of pink and one which is pure white. Seed is freely set and large clusters of pods develop.

Cuttings of non-flowering shoots taken in late summer are easy to root in gentle heat but the most common method of propagation is by seed. Plants raised from seed will flower in under two years and the different colored flower forms come true. Seed will germinate more readily if covered with boiling water, allowed to remain in the cooling water for 24 hours before being sown. Although sowing can take place at any time, the best time is in February or March. Sow in a well drained lime-free compost and place in a temperature of 60°-70°F and germination will take place within a few days. Pot each seedling separately into a small pot as soon as the first true leaf appears using any kind of lime-free potting compost. Never allow the compost to dry out and pot on into a larger container whenever the pot fills with roots. At all times give full light and plunge out of doors during the summer months.

Planting should take place in the spring as soon as the danger of frosts has past. As mentioned, planting should take place against a wall, shrub or stump. Prepare the ground thoroughly, working in some form of organic matter and if the soil is at all dry thoroughly soak it. Following firm planting encourage no more than four strong shoots, pinching back any that are surplus.

If planted against a wall, tie these shoots to parallel wires. After the spring flowering cut all shoots which have flowered back to within two or three buds of the framework. This annual pruning after the spring flush is essential for the seed set is so great that if these are left vigour declines with resulting poor flowering; following this pruning other flowers are often produced erratically throughout the summer.

This shrub is only moderately hardy but it will withstand up to 10°F of frost (22°F) without damage. Although the shrub itself is hardy, damage can occur to flower buds depending on the stage of development when frost attacks. The choice of site, therefore, should be one protected from cold winds and frost pockets should be avoided. It should, however, be hardy in most of the Pacific Northwest. For those that can grow it, here is an unusual shrub with most attractive flowers.



Clianthus paniceus
Illustration by: Mareen S. Kruckeberg

Acer capillipes

Milton Gaschk Tacoma, Washington

There is a great fascination in searching, finding, and growing of a rare or uncommon plant. Acer capillipes, if not rare, at least falls into the category of the uncommon. Of the 24 Arborata and Botanical Gardens listed in Mr. Brian Mulligan's book, Maples Cultivated in the U.S.A. and Canada (1958), only eight are listed as growing this species including the Arnold Arboretum in Mass. Alan Mitchell in his attractively illustrated book, A Field Guide to the Trees of Britain and Northern Europe indicates its occurrence in Europe to be "infrequent". His evaluation includes the remark, "This is usually the best of the snake-barks and (bark) is very bright when young." He uses the term "red snake-bark maple" as the common name.

This is an Oriental maple, first introduced to the western world in 1892. In the botanical classification of maples, this species is among the 13 listed in the *Macrantha* series, which includes the more familiar *Acer pensylvanicum* (the moose-wood) from our own eastern U.S. A common feature of most trees in this series is the parallel longitudinal bark striations, usually white. This, doubtless, is the source of the term "snake-bark".

Country of Origin

Acer capillipes is peculiar to Japan and has not been found in other Asiatic countries. Professor Sargent observed this tree growing "extremely abundant" in northern Honshu. It has also been found on the island of Shikoku. Two varieties are known; var. fujisanense, which grows on the slopes of Mt. Fujiyama, has five very small lobes on smaller leaves than the type, and var. morifolium, which is found only on Yakushima Island. It differs in having much smaller lobes on the broad-ovate leaves. Sometimes lobes are absent.

Because of its sexual affinity with its series-related species such as A. Acer denvilli or A. rufinerve cross-pollinated forms can be expected. These natural hybrids often exhibit confusing and conflicting similarities - appearing to be A. capillipes, but yet dissimilar.

According to two authorities, *Acer capillipes* attain heights of 35 to 75 ft. in its native habitat. In cultivation, maximum height is reported to be about 45 ft.

The rather stiff branches ascend at narrow angles from a moderately short bole. Leaves have three to five pointed lobes, are three to five inches long by three-fourths as wide, reddish when young. Petioles are bright red. The inflorescence is an arched raceme, greenish white, about four inches long. The young leaf lobes tend to fold or angle upwards from the sinus, forming a shallow V.

Rate of Growth

Growth appears to be rapid. The two specimens in my garden, grown from seed which germinated in the spring of 1970, are now 12 ft. high, with d.b.h. of $1\frac{1}{2}$ inches. One tree flowered in 1975, the second in 1977. The most attractive feature is the very bright red bark with the strong contrasting white vertical striping. In my experience, fall leaf color has not been orange, red and crimson as reported by Alan Mitchell. Possibly the shady environment in which my trees are grown inhibits this coloration. The inflorescence on an individual tree may be either male or female or contain both male and complete flowers (andro-dioecious).

THE HUMBLE EARTHWORM

W. N. CRAIG
Reprinted from "Little Gardens" Winter 1937

When one hears gardeners, florists and nurserymen frequently bemoaning the presence of worms in the soil, I sometimes think it is not easy for us to realize how dependent we really are for our existence on the humbler forms of life. It is, for instance, hardly too much to say that without these earthworms there would be no other form of life on the land. That great scientist Darwin pointed this out clearly as the result of his long investigation into the subject. These worms, by their constant activities under the surface of the soil, keep it both loosened and sweetened by passing it through their bodies.

It has been calculated that in rich soil such as we find in amateurs and market gardens or other highly cultivated tracts, there are as many as 50,000 of these worms per acre and they pass more than ten tons of soil per acre through their bodies each year and deposit it on the surface in the form of worm castings. In ten years this would form a layer of fine surface soil over two inches thick. This constant raising of the soil from below to the surface explains why old buildings in the course of centuries become so deeply buried that much excavation is necessary to expose them again. Lime and fertilizers spread on the surface of land to improve its quality are slowly buried by the same process. Darwin, in course of his investigation, found that lime which had been spread on the surface was in fifteen years four inches below it, soil, to the extent of nearly one-quarter inch annually, having been brought up to the surface by the worms and spread in the form of castings over the lime. On a certain piece of swampy land in England a layer of marl and cinders was found to be five inches below the surface in twenty-one years, and in another case broken chalk was buried seven inches in twenty-nine years.

In the fall worms are apparently the most active. Their food then consists largely of fallen leaves, which they seize and draw into their holes. In the course of time most of the dead leaves will have been disposed of in this way, helping materially in enriching the soil. Worms are mainly night workers, and they return at dawn into their burrows, the entrances to which will be seen plugged with dead leaves, bits of straw or hay, pine needles and even small stones to render them safer, and so we often see much debris littering lawns. Worms are an interesting study, and when men say they wish every worm could be destroyed, how little they really know of the services these humble creatures render to mankind!

NEWSLETTER

Summer 1978

This supplemental letter or organization news is designed to be removed from the Journal for easy reference. Coming events of horticultural interest are shown. The listing of new members may be easily added to your roster.

PRESIDENT'S LETTER

As summertime and vacations approach, NOHS activities continue to keep all of us busy. We are now looking forward to our June 1 Walking Tour of Capitol Hill Gardens. Following the wonderful day on Bainbridge Island last month, this is sure to be another outstanding event. June also brings our annual Fern Sale in the Bellevue Square Pavilion. Sue Olson, Chairman, has found many rare, unusual ferns suitable for indoor as well as outdoor culture. Call her if you could help. Be sure to attend and bring your friends - June 22, 23 and 24.

Plants are already being ordered for the big Fall Plant Sale, Mike Hayes, Chairman, reports. She also needs volunteers; call her if you can help or have any ideas. Her committee is planning demonstrations and exhibits as well as a great diversity of plant material which our sales are known for.

Three very distinct fall programs are on the calendar the 2nd Thursdays of September, October and November. Don't miss learning more about seeds, bulbs, and the soil in which they grow.

Our Rhododendron Study Group, chaired by Marge Baird, has been working long hours on the North American section at the Rhododendron Specie Foundation Garden. The Board has voted \$1,000 to be spent in that section of the gardens supervised by this group. Any of you who have not seen these gardens are due for a treat. I highly recommend a visit to them. Watch our calendar for open house dates when they are open.

Your Board looks for input and ideas from all of you. Do give us a call or drop us a letter. We will enjoy hearing from you; and we look forward to seeing you at our events.

Have a wonderful summer, -- Ann Herron

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MEMORIAL FUND

The Board of Directors wishes to thank the following people for recent contributions to the Memorial Fund: Marjorie Baird, Elizabeth C. Miller, Marian C. Pettit, Helen Jean Wilcox, Dorothy Matheny, Margaret D. Lile, Dorothy Brauss, Judy Addington, Martha Isaacson, Jane Wycoff and Sarah Reath. All contributions to the Memorial Fund are used exclusively (unless otherwise specified) toward the purchase of books for the University of Washington Arboretum Library.

CHANGE OF ADDRESS

Change of address or corrections in name, address or phone number. Please notify Helen Lea, Membership Chairman by mail, 1630 - 40th Ave. East, #1107, Seattle, WA 98112, or by phone at 329-0770. It costs the NOHS 25¢ per item returned, money we would all rather spend on projects within the Arboretum program.

At the April meeting of the Board of Directors, the purpose of the Northwest Ornamental Horticultural Society was reaffirmed. It reads, "The purpose of the Northwest Ornamental Horticultural Society places emphasis on basic horticultural education. Programs, horticultural events, exhibits, plant sales, garden tours, lectures and study groups are provided to stimulate the interest of gardeners in the wealth of plant material which can be grown in the Northwest and how to grow it. Financial support is given to the University of Washington Arboreta and other educational horticultural endeavors." In that light, it is interesting to review the Society's activities during the past year. clude free monthly lecture series at the Pacific Science Center, numerous study groups, the annual fern sale, the annual fall plant sale, spring and fall tours of the Bleodel Reserve and the spring walking tour of city gardens. Representatives have attended joint meetings of the City of Seattle and the University of Washington Botanical Garden Committee. The group participated in the Washington State Federated Garden Clubs' Christmas Fair with a display of horticultural materials, the Jones and Jones Model of the planned development on Union Bay and materials on activities and membership in our organization. Valuable books have been added to the University of Washington Arboretum Library.

Financial support was given in the following manners:

Membership to the American Association of Botanic Gardens and Arboreta, \$100.

To the University of Washington Arbor Fund to bring Mr. Charles A. Lewis and Drs. Rachel and Stephan Kaplan to Seattle for a conference on "People-Plant Relationships", \$1,000.

Membership to the University of Washington Arboretum Foundation, \$10.

Membership to the American Horticultural Society, \$25.

To the Rhododendron Specie Foundation for expenditure in the North American section, \$1,000. This area is being organized and planted by our Rhododendron Study Group. Some of this money has been used for rock work which is now in place, and more will be used for expanding the collection and companion plantings in the fall.

Save the Rae Selling Berry Garden Fund, \$100.

Membership Application

NORTHWEST ORNAMENTAL HORTICULTURAL SOCIETY

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turpose:
Theil be to further horticulturel development end meintenence of the inversity of Washington Arboreta and plant life situated therein.

Lecture Series, Study Groups, Annual Fall Plant Sale, Tours of gardens of horticultural interest, Quarterly Horticultural Journel.

Membership activities encompass:

University of Washington Arboreta end plant life situated therein.	horticultural interest, Quarterly Horticultural Journel.		
(Please fill in form as you wish information to appear in yearbook	k)		
Mr. Mrs Ms Miss			
Name	(First Name)		
Address	Phone		
City & State	Zip		
New Member (date) (Membership renewals v	Or Renewal (date)		
PLEASE MAKE CHECKS PAYABLE TO: Northwest Ornamental Horticultural Society	Insest to date of Membership Application.) TYPES OF MEMBERSHIP: The \$500.00		
MAILING ADDRESS:	Life		
University of Washington Arboreta Seattle, Washington 98195	Contributing 25 00		
	Sustaining		
relephone: 513 8800	, Group Membership Milandar 10.00		

WELCOME NEW MEMBERS

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ZONOFF, Mrs. George 9788 N.E. Murd	HERSCHEL, Ms. Harriet 2147 Boyer Ave. E., Seattle 98112
TUPPER, Dr. & Mrs 3126 W. Laurell	HELLIESEN, Mr. & Mrs. Henry M. 285-1755 3228 Conkling Pl. W., Seattle 98119
TUFTE, Mrs. Calvin 1122 29th S.E.	HAYES, Mrs. Frederick W. Box 355, Medina 98039
TUEBBEN, Ms. Monica 11605 Marine V	HAGAN, Mrs. Arthur W. 10401 N.E. Brackenwood Lane, B.I. 98110
TELBAN, Ms. Ethel 508 Cedar Ave.	Jerry Kluin, Dir. Horticultural Program P.O. Box 33768, Seattle 98133
SCHENK, Mr. George Box 487, Bothe	EWART, Mrs. George A. 454-9793 4312 Hunts Pt. Rd., Bellevue 98004
SANDERSON, Mrs. Eri	CONN, Mrs. William 10049 9th N.W., Seattle 98177
THE RESOURCE, Mark	Drive E., Seattle
REEDER, Mrs. Paul 7117 Interlaak	Burnaby, B.
RATTRAY, Mrs. Mauri 1315 Lexington	6915 N.E. Sacramento St., Portland 97213 BURNHAM, Mrs. Rosemary 604-435-9566
4638 36th Ave.	BINFORD, Mrs. Janet 282-0427
16651 S.E. 235 RATHJE, Mrs. Theodo	ANDERSON, Mrs. Thomas R. 572-2943 816 No. Stadium Way, Tacoma 98403
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Lisle, Illinoi	•
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1644 Windemere	

COMING GARDEN EVENTS

Aug. 25, 26 & 27	Aug. 23 & 24	Aug. 23	Aug. 19 & 20	June 28 July 26	June 22, 23 & 24
American Fuchsia Society Show Northgate Shopping Center Mall Fri. 25, 9:30 A.M9:30 P.M. Sat. 26, 9:30 A.M6:00 P.M. Sun. 27, 12 Noon-5:00 P.M.	Dahlia S Washingto	20, 10:00 A.M6:00 orers' Walk sored by: The Arbore at Foundation Office	Kitsap County Dahlia Society Show Eastside Masonic Temple East 11th and Perry Ave., Bremerton Sat. 19, 2:00 P.M7:00 P.M.	Explorers' Walk Sponsored by: The Arboretum Foundation Meet at Foundation Office parking lot - 10:00 A.M. Explorers' Walk Sponsored by: The Arboretum Foundation Meet at Foundation Office parking lot - 10:00 A.M.	Fern Sale Sponsored by: NOHS Bellevue Square Pavilion Thurs. 22, 10:00 A.M6:00 P.M. Fri. 23, 10:00 A.M6:00 P.M. Sat. 24, 10:00 A.M1:00 P.M.
	Sept. 28 & 29	Sept. 27	Sept. 14	Sept. 9 & 10	Aug. 26 & 27
	NOHS Annual Fall Plant Sale Bellevue Square Pavilion	Explorers' Walk Sponsored by the Arboretum Foundation Meet at Foundation Office parking lot - 10:00 A.M.	NOHS free lecture on seed collection and storage at the Pacific Science Center, Eames Theater. Displays at 10:00 A.M., Lecture at 10:30 A.M.	Puget Sound Dahlia Association Show Rainier Room - Seattle Center Sat. 9, 1:00 P.M10:00 P.M. Sun. 10, 10:00 A.M 5:00 P.M. Admission 50¢; Senior Citizens, free Children accompanied by adults, free	68th Annual Show of the Washington State Dahlia Society Admission free. Pacific Lutheran University Student Union Bldg., South 121st and Park Ave. So., Tacoma Sat. 26, 2:00 P.M8:00 P.M. Sun. 27, 10:00 A.M7:00 P.M.

Adiantum capillus-veneris

Florence Free Seattle, Washington

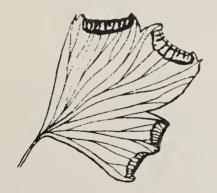
In May, 1950, my mother asked me to try to find a "maidenhair fern" for her Conservatory, a pretty little glass roofed room off the dining room where she had a fountain and kept potted plants.

I found two Adiantum capillus-veneris at a florist's shop, one in very poor condition from being left in the shop window in full sun. The clerk said that it would soon recover and didn't I want it for myself at half price? No, I didn't want to fuss with house plants. Did I know that it didn't have to be a house plant but was hardy enough to be planted outdoors? No, I thought that "Venus Maidenhair" was only for an indoor room with high humidity.

With considerable skepticism, but also with considerable cupidity, and loving the idea of trying to grow a florist maidenhair outdoors, I bought it and planted it on the north side of the house within a foot of the fireplace chimney.

Now, twenty-eight years later, it is a plant two feet across and is one of my Pride-and-Joys. I have never given it winter protection, but perhaps our winter fires in the nearby fireplace have given it the extra warmth that it has needed during a cold spell.

Thomas M. C. Taylor says in <u>Pacific Northwest Ferns and Their Allies</u>, that its range is from southeastern British Columbia "from the runnels of hot springs" to Florida and across the south to California. He says that it likes alkaline rocks or limey soil. I have never given it lime but there may be some leaching out of the brick mortar of the fireplace. I am careful to give it slug protection in the spring, but it is now such a vigorous plant that I doubt if even their voracious appetites could keep up with its tender new growth. Later on, when the fronds toughen, they do not relish it.



Spore of Adiantum species are enclosed along the veins of the recurved part of the lobes.

Nerines

C. A. Norris Nerine Nurseries Welland, England

Nerines are bulbous plants which originated in South Africa where the thirty or more species are still to be found. The first species to be introduced to Europe, about 1635, was named Nerine sarniensis by Linnaeus more than a century later, and was thought at one time to have come from Japan; but it is from those early beginnings that the thousand or more named cultivars have been developed.

Today there are two main groups of nerines that are grown commercially on a wide scale particularly in Holland, where the cut flower market exceeds a million blooms a year. These are the descendants of the original Nerine sarniensis which has its leaves in the winter and needs greenhouse protection. The other main group is N. bowdenii which has leaves in the summer, is dormant in winter and will stand long periods of quite severe frost. Whilst there are other species that are dormant in winter and fairly hardy the main horticultural interest is with the descendants of these two species and their hybrids.

For those who don't know these beautiful flowers some description is needed, the more knowledgeable must skip a few lines. All nerines flower in the fall with some of the species producing their spikes in August, and in most years a few flowers, again from one of the rarer species, are available at Christmas. However, mid-October sees the peak and in this month the London Royal Horticultural Society has given gold medals to nerines in two of the last three years.

The fine strong stems, which vary from fifteen inches to over two feet, carry flower heads of up to about eight inches in diameter consisting of anything up to nineteen or even twenty individual florets. In colour there is a great variety available and perhaps it is easier to say what is absent! There are no true blues and no yellows, but the spectrum is covered from orange through all the reds and scarlets to lavender and purple, and from the purest white to very deep reds. In recent years some most effective bicolours have been developed and these include delicate eggshell pink with a cerise central rib on the one hand, to a flamboyant scarlet with deep, deep, purple rib on the other.

The variety is not only in colour for the shape and size of the flower can produce very different appearances. There is one species, Nerine filamentosa, which has long and very thin filaments standing upright from the individual segments which are so recurved that they can touch the pedicel. Then there is N. peersii that has brilliant yellow pollen, and another species which has a delicious fragrance whilst most nerines have no scent at all. Some of the cultivated varieties have almost "pudding basin" shaped heads with all the florets touching each other, but others, with fewer individual florets and long pedicels have an open appearance which allows the charm of each individual floret to be appreciated. There is too tremendous variety in the actual segments. In some of the species, notably N. undulata and N. flexuosa, the segments are crisped and twisted through

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much of their length but the species *N. pudica* has white flowers striped with carmine that are almost plain and only a little recurved. The smallest *Nerine* is a little white gem with a flower that is barely an inch across and this is one that I found growing in the rocky tops of mountains only a few miles from Pretoria.

In South Africa, where all the species came from, nerines are to be found in almost every conceivable habitat from loose rock scree at nearly 9,000 feet in the Drakensberg Mountains where the flowers can be, and often are, covered with snow, to swamps and marshes out in the Orange Free State



and on the edges of the Kalahari Desert where there is less than five inches of rain annually on average, and in some years no rain at all. However, the main line of nerines stems from Nerine sarniensis and this grows on cliffs and in soil that is deficient in almost every nutrient; analysis of one sample showed only five parts per million of available nitrogen. So whatever you do with nerines, don't spoil them and they will last a lifetime.

Nerines have many endearing features; you can forget most of them from May to September for this is the period when they are dormant and will survive perfectly well with no water at all. They hate a rich soil and positively thrive on near starvation, so don't ruin them by overfeeding. As cut flowers they last magnificently and those flowers, so full of elegance and charm, come at a time of the year when, with the approach of winter, we all need cheering up. Really they have only two major requirements - plenty of water when they are in full growth, and for most of those that have leaves in winter, protection from frost.

In this article I have not given long lists of names of the cultivars that are available but a few must be mentioned. 'Fothergillii Major' is one of the earliest of the Nerine sarniensis hybrids to flower and is not only very strong and free flowering but quite one of the best vermillion flowered varieties. Its near relation 'Corusca Major' has been in cultivation for well over a hundred years and is the most widely grown of all nerines for the cut flower trade in Holland. The scarlet head usually has ten to fifteen florets with fine upstanding filaments. 'Belladonna' has a more open head with white shading to phlox pink flowers. 'Curiosity' is small with a strong bluish stripe in the center of deep pink flowers. 'Mansellii' is one of the last to flower and is at its best in November. If water is withheld, flowers can easily be produced for Christmas.

With over a thousand to choose from, it is difficult to pick and choose especially as so very many are not yet available and it is pointless to draw attention to the sublime beauty of the white 'Olympus' or the massive 'Fortune'. In three or four years the list of what is available will be very different thanks to all the breeding that has gone on over the past twenty years.

As this goes to press, the writer will be in Africa searching out the sweet scented, near desert species for possible hybridization and later development and perhaps sale to the new gardens being formed by the oil wealth of Arabia.

Cotoneaster Webworm

Sharon J. Collman
King County Extension Agent
w/Washington State University

SCIENTIFIC NAME:

Cremona cotoneaster (Busck)

HOST PLANTS:

Specific to Cotoneaster; especially C. horizontalis

DAMAGE:

Dense white webbing along branches; may become extremely heavy and unsightly.

Leaves are skeletonized and turn brown.

Plants or branches may die after repeated attacks.

DESCRIPTION:

<u>Larvae</u> - 1/2", dark brown, naked caterpillars; hide and move within silken tubes; leave tubes to feed.

Pupae - small brown; within the webbing.

Adults - tiny grayish-black moths; nocturnal.

LIFE CYCLE:

The literature describes this insect as over wintering in the webs, with adults emerging and laying eggs in late spring. However, the life cycle has not been studied in this area. My suspicion is that the adults appear later here; some further observations on this pest are in order.

METHODS OF CONTROL:

Remove and destroy infested branches.

Strip webbing from branches, being sure to catch any larvae that drop from the branch.

Washington State University currently lists the following pesticides as effective: Carbaryl (Seminol) or Diazinon liquid. Be sure to check that the label includes the host plant and pest and read all precautions before buying or using.

I have not found any information on natural enemies of this pest.

COMMENTS:

If pesticides are used, it would be best to apply them on a cold day or in very early morning or late evening hours when honeybees are not active. Cotoneaster horizontalis flowers for a considerable length of time and is highly attractive to honeybees. During flowering Sevimol plus two tablespoon molasses is least toxic to honeybees. Molasses acts as a repellent to bees, but does not repel pollinating flies. Pollination is necessary to form the berries.



NOHS Seed Exchange

In the initiation of a seed exchange it is not the intention of the Northwest Ornamental Horticultural Society to duplicate those existing programs sponsored by the American Rhododendron Society, American Rock Garden Society, American Horticultural Society and other specialized organizations. We would like to supplement those existing seed distribution schemes by offering seed of little known and grown trees, shrubs, herbaceous plants and ferns, predominantly of American natives, strongly Northwest oriented. We want to make it quite clear, however, that we do not wish to exclude rare and interesting plant material from other parts of the world.

It has been brought to our attention by one of our overseas members, that because of the arbitrary November 1st cutoff date for receipt of seed by most exchange programs, many unusual highly desirable seed never appear on lists because they ripen from mid-October through December. After much discussion, with this in mind, the NOHS seed exchange deadline will be January 15th, beginning in 1979.

We receive many inquiries from our members requesting information about sources of plant material not found in nurseries or elsewhere. We invite you to send your requests to the Editor; we will compile a "Wish List" each quarter, for inclusion in the journal. Perhaps one of our members grows your desired plant and will be reminded to save the seed when ripe or collect it in the wild for you.

Wish List

*Asarum hartwegii Asplenium adulterinum colensoi Cassiope hypnoides (NE-US form) Cheilanthes aurantiaca Chrysolepis chrysophylla sempervirens Clianthus puniceus Disterigma empetrifolia Epacris alpina *Fritillaria purdyi Gleicheria dicarpa v. alpina Kalmia hirsuta microphylla - white form Ledum nipponicum Myosotidium hortensia *Myrica californica Pernettya alpina Perrotia persica Phyllodoce alpina Phyllodoce caerulea (NE-US form) *Phyllodoce empetriformis - white form *Picea mariana *Primula borealis *Purshia tridentata *Quercus garryana *Rhododendron camtschaticum - white form Rhododendron ericoides lapponicum macrophyllum - white form *Ribes sanguineum - white form *Shepherdia canadensis *Sisyrinchium douglasii Styrax wilsonii *Trillium hibbersonii ovatum rivale *Veronica grandiflora *Viola langsdorfii trinervata venosa

*Northwest natives, including Alaska, British Columbia, Washington, Oregon

Seed Exchange Director: Mrs. Mary Kenady

18013 W. Snoqualmie Valley Rd. N.E., Duvall, WA 98019

Tidbits by Ladybug.

Moles: Here's how I rid my yard of moles after years of trying everything in the store. As soon as possible after a mound appeared, I located the actual opening and poured about a pint of gasoline into it. Cover the hole and nothing more. I got a number of repeats and new outbreaks but I persisted and haven't seen a single one for many years. The neighbor's yard didn't seem to get any worse. I have a vacant lot next door which should provide a sanctuary. My theory: That odor is not only unpleasant but very long lasting. I don't have any reason to believe it is lethal.



Dan Hendricks Mercer Island

Collected seed should be stored in an air tight container or package until either planted or sent to the Seed Exchange. Do not freeze prior to mailing. If, however, you receive seed of hardy plant material and are unable to take care of it right away, packets can be stored in the freezer, in a plastic bag to keep dry, but plant immediately upon thawing.



Quercus garryana: Although spring may seem an unlikely time to collect acorns of any Quercus species, we have discovered that they can be found in limited numbers if you look carefully under the wild oak trees on the Tacoma prairies. You will know which are viable, because those that have been overlooked by the jays, squirrels or insects that bore into the acorns and devour the tasty nut within, are sprouting this time of year. Pot up those you find in good garden soil, keep watered and watch your little oak trees grow.



Thank you for the saxifrage you found near Terrace, B.C. which you sent for identification. It is a very small form of Saxifraga occidentalis. It arrived in very dry condition, but after soaking it in hot water it greened up right away and is now planted in the garden.



Al Rose U.B.C. Botanical Garden

Have you noticed that at this time of year the berries of Skimmia japonica are sprouting right on the bush?



It is not always possible to immediately plant those newly acquired treasures. Pots should not be set on a completely flat surface, especially during prolonged rainy periods, because the excessive moisture will not drain adequately, if at all. Set pots high enough on gravel, several small, flat rock, brick or wood, anything that will free the drainage hole(s). Bulbs are particularly susceptible to decay.



Soldanella villosa, the easiest of all soldanellas to grow, should never be confined in a pot for any length of time as it is a creeper.

Altha Miller



Go-Togethers: Pink dogwood and the pretty old evergreen Azalea, A. 'Mrs. Fischer' (if it's still available)! Most pinks and reds clash with the muted brownish pink-to-rose of the dogwood; white is too "clean"; you might try blue Scilla or blue Rhododendron russatum, R. impeditum or the hybrids R. 'Blue Diamond', R. 'Blue Tit', R. 'Bluebird', etc.



Marge Baird

Ledum groenlandicum - compact form

The original plant was brought to Arnold Arboretum and from this rooted cuttings were distributed. These progeny at 15 yrs. of age are 15-18 in. high and about the same width. In central New Jersey, this plant has thrived and bloomed profusely each year. The small plants sold at the fall 1977 plant sale of NOHS are seedlings of the plant in the Morris Plains, N.J. garden of Don and Hazel Smith. It remains to be seen what proportion of these seedlings will come true to the parent.



James Cross

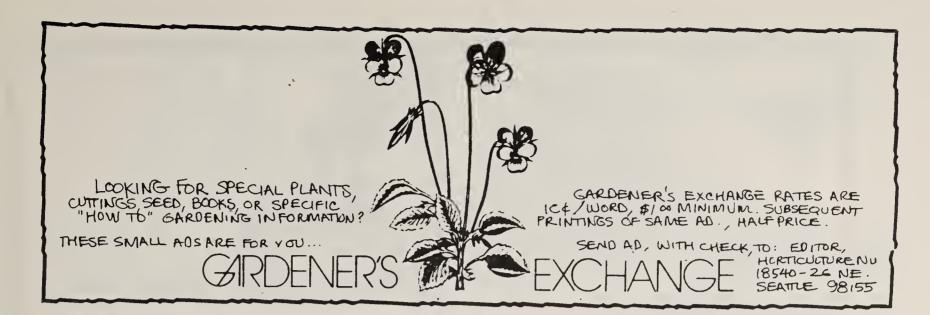
Because of Nan Ballard's enthusiastic review of The Country Diary of an Edwardian Lady in the Winter 1977 issue of Horticulture Northwest, it appeared under the Christmas tree of this gardener. It is an absolute delight which will be treasured and enjoyed for many years to come.



Quote from Gordon Edwards' <u>Wild and Old Garden Roses</u>: "Despite quoted widths, old garden bush types are planted close enough to enable the old ladies and gentlemen to hold each other up -- or mostly so."

Betty Coe





The Rhododendron Study Group would like plants, seed or cuttings of any eastern species or variety of Kalmia, Rhododendron macrophyllum, Leucothoe fontanesiana. Call Marge Baird, 454-3862.

Wanted: Plant or seed of the white form of Ribes sanguineum. Mareen S. Kruckeberg, 20055 15th NW., Seattle WA 98177.

Wanted: Plant or cuttings of Rhodothamnus chamaecistus. Roger Gossler 1200 Weaver Rd., Springfield, OR 97477.

Wanted: Cuttings or small plant: Rhododendron ericoides, Gaultheria microphylla, Disterigma empetrifolia, Diapensia lapponica. Sallie D. Allen, 18540 26th Ave. NE, Seattle, WA 98155.

Wanted: Spore of Bommeria hispida, Asplenium adulterinum, A. colensoi, A. germanicum, Gleichenia dicarpa var. alpina, Cheilanthes aurantiaca, Sue Olsen, 2003 128th SE, Bellevue, WA 98007. Wanted eastern US form of Cassiope hypnoides or Phyllodoce caerulea, James F.Cross, Box 730, Cutchogue, NY 11935.

Try our small ads in the Gardner's Exchange. They bring results.

Please save your PLASTIC POTS, 3" to gallon can size, for Mareen Krucke-berg, phone 546-1281. She will exchange for a free rare plant from MSK Nursery.

The ERICACEAE STUDY GROUP is compiling a slide library of Northwest native Ericaceae in the wild and in gardens. Please contribute your extra slides to this collection, which will be available on loan for educational purposes. Send slide to Ginny McElwain 6815 42nd Ave. NE, Seattle, WA 98115.

The Sixth Annual NOHS Fern Sale will be June 22, 23 - 10 AM - 6 PM, 24 - 10 AM-1 PM. Bellevue Square. Mark your calendar for this special event.

Seed Exchange, January 1979: Working on the Seed Exchange is an excellent learning experience, a way to contribute toward an important new NOHS service and an opportunity to meet and work with other interested members. If you wish to participate, call the Seed Exchange Director, Mary Kenady, 778-1800.

Wanted: Basic gardening books to start a library for the Resource Village Horticultural Program for the retarded. Hortus II would be welcome; Wise Garden Encyclopedia, Collins Guide to Bulbs by Patrick M. Synge, new or used; basic garden tools. Contact Sallie Allen, Chairman: The Village Horticultural Advisory Committee - 363-3189.



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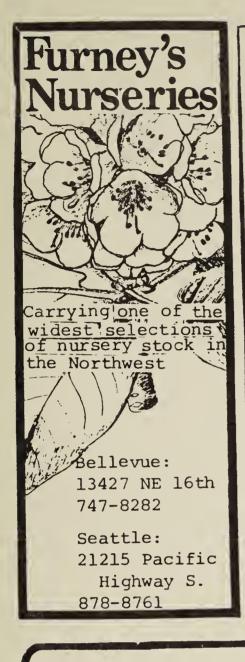
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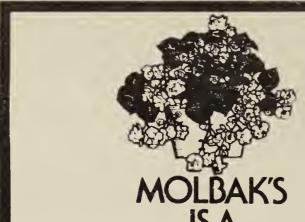
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